TRAG AUTOMATIC SYSTEMS

Specialized Electronic Control Equipment

P. O. BOX 2101
DETROIT, MICHIGAN 48231

February 11, 1966

T. Nelson, Sys. Cons.
Box 1546
Poughkeepsie, New York 12603

Dear Sir:

Thank you for your inquiry concerning our new product. We are enclosing our general bulletin as well as three of our application bulletins which may be of interest to you.

If you have any questions, we will be very glad to provide you with any detailed information which you may require.

Very truly yours,

John Gandolfi

John Gandolfi
Sales Manager

JG:ps
Enc. G-108
S-108
QC-108
D-108

VISIONTRON 404

40 POSITION ALPHA-NUMERIC READOUT

MODEL DESIGN & SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

DECODER AND DISPLAY IN ONE UNIT

ELECTRO-MAGNETIC OPERATION

BUILT-IN MEMORY

The 404 alpha-numeric readout unit is designed for maximum malfunction-free continuous display of numbers "0" thru "9" alphabet "A" thru "Z" with space for 4 additional symbols, in all 40 pieces of information. Optimum readability under varying light conditions and from acute viewing angles has been achieved. Eliminated are many problems commonly associated with rear projection or illuminated displays such as varying contrast, bulb burnout, poor readability and excessive service. An attractive and pleasing appearance can be important to the acceptance of any system or panel. Visiontron readout units are of clean simple design that fit readily all panel configurations.

U.S. PATENT PENDING

APPLICATION Visiontron readout units are designed for use in readout systems, numerical displays, alphabetic and symbolic displays, counters, T.V. election displays, instruments, annunciator boards, signal alarm systems, process control boards, test equipment, military tactical status display board systems, industrial control displays, stock market price quotation display systems, arrival departure boards or where attractive and dependable readout is of importance.

CONSTRUCTION Rugged, simple design. 40 display elements (flaps) are embedded in the Visiontron dynamic head. Readout flap assembly is positively located and secured within the Visiontron housing. Printed circuit boards are used for internal Connections and 8 channel decoding switch. Compact construction and high resonant frequency characteristics of their mechanical design make the 404 inherently resistant to shock and vibration.

HIGH CONTRAST READABILITY 40 piece plastic flap assembly is employed to display high contrast white numbers, alphabet and symbols, in well defined Gothic style on non-reflecting black clearly visible under all ambient lighting conditions, without handicap normally associated with the bulb displays. Visibility up to 250 feet.

FLAT SINGLE PLANE VIEWING All 40 alpha-numeric characters are rapidly rotated and appear on the front face of the 404 unit. There are no lenses or front mounted plates, assuring unlimited viewing angle and sharp character definition over the entire display area while problems of parallax and depth distortion are eliminated.

CIRCUIT OPERATION Selected position is reached directly without reset through an 8 channel contact code, assuring malfunction-free operation. Visiontron readouts are not subject to readout errors due to loss of pulses commonly associated with readouts requiring reset prior to each signal pulse and set pulse count. Visiontron 404 readout does not depend on pulse count to reach correct readout position. Control of all 40 readout positions is accomplished through selection control code by closing 4 out of 8 input code contacts. (See set-up contact code chart.) Readout unit when activated will seek through a decoder contact code, inside the readout, the position that corresponds to the contact code in agreement with the control contact code.

LOW POWER The 404 total operational power requirement for operational set-up is 2.7 watts. Visiontron readouts continue to display posted character even during power failure since power is required only for set-up, not to sustain readout information.

HIGH RELIABILITY Service reliability is enhanced by absence of bulbs and other luminous devices subject to rapid deterioration under vibration, heat and voltage peaks during on and off operation. No expendable parts are used in Visiontron. The 404 readout does its own decoding, selected position is reached directly without reset. No auxiliary translators, relays, or diodes are required.

ACTUAL SIZE

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BULLETIN 404-64 PRINTED IN USA

404

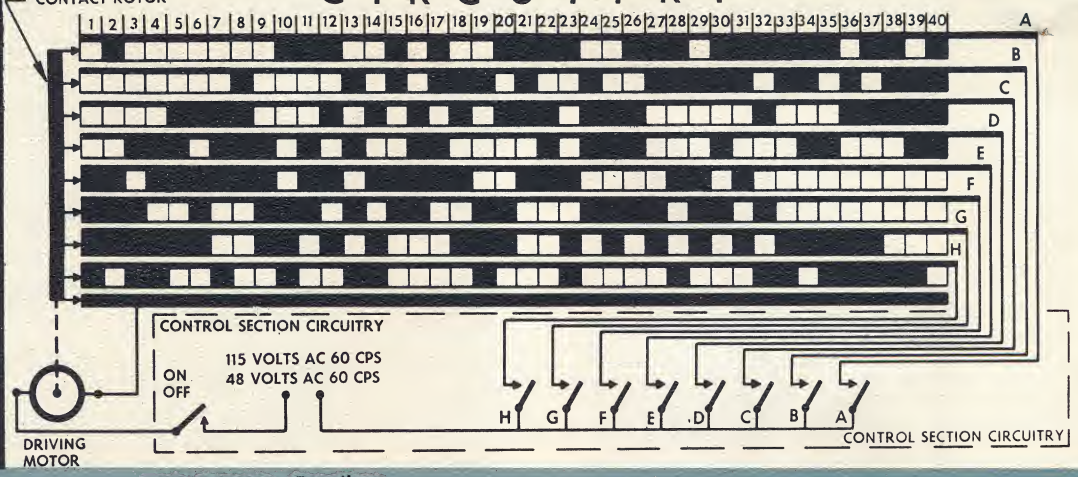
40 POSITION ALPHA-NUMERIC READOUT

CONTROL CIRCUIT READOUT SET-UP CONTACT CODE

POSIT. NO.	DISPL'Y POSIT	CLOSED CONTACT SHOWN IN BLACK A	B	C	D	E	F	G	H
1	BLANK								
2	1								
3	2								
4	3								
5	4								
6	5								
7	6								
8	7								
9	8								
10	9								
11	0								
12	A								
13	B								
14	C								
15	D								
16	E								
17	F								
18	G								
19	H								
20	I								

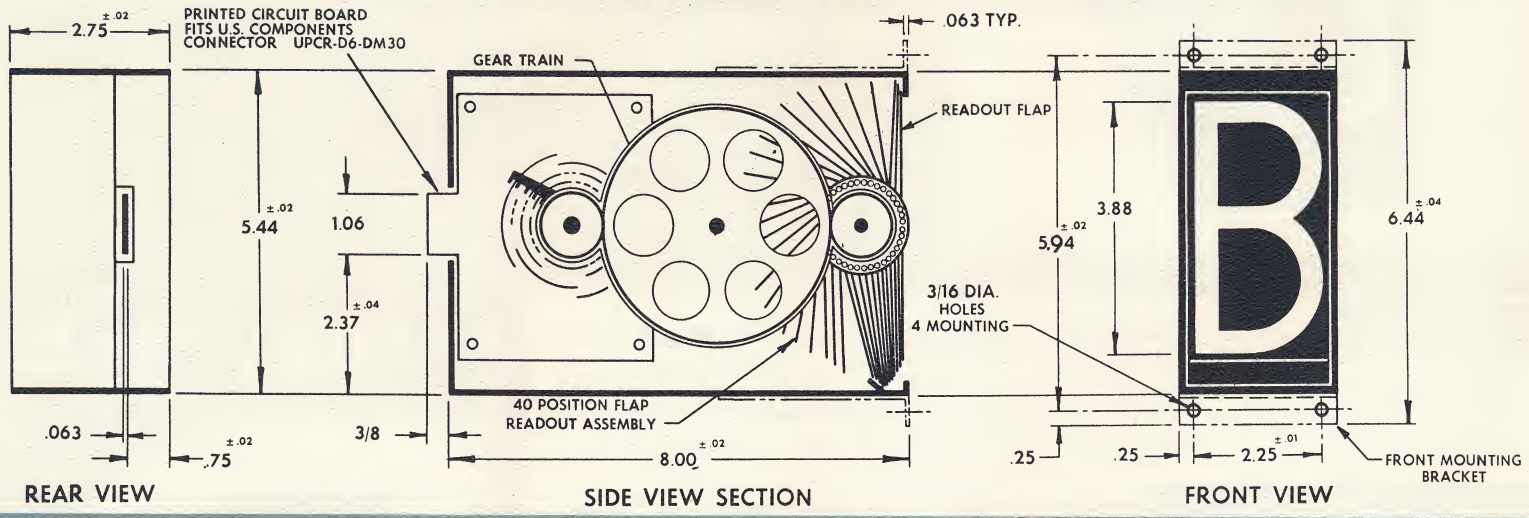
POSIT. NO.	DISPL'Y POSIT	CLOSED CONTACT SHOWN IN BLACK A	B	C	D	E	F	G	H
21	J								
22	K								
23	L								
24	M								
25	N								
26	O								
27	P								
28	Q								
29	R								
30	S								
31	T								
32	U								
33	V								
34	W								
35	X								
36	Y								
37	Z								
38	BLANK								
39	BLANK								
40	BLANK								

CIRCUITRY



U.S. Patent Pending.

SCHEMATIC DIAGRAM AND DIMENSIONS



READOUT SPECIFICATIONS

DISPLAY CAPACITY:	Numbers "0" thru "9" alphabet "A" thru "Z". Plus 4 blank positions maximum of 40 characters.
CHARACTER SHAPE:	Gothic – round characters for fast scanning.
READABILITY:	Up to 250 feet.
CONTROL:	See circuitry schematic diagram and set-up contact code chart.
CHARACTER COLOR:	High contrast white on non-glare black background. Unlimited color combination selection available on special orders.
CHARACTER DIMENSIONS:	Height: 3-7/8" Width: 2-1/8" Special symbols within an area bound by 3-7/8" X 2-1/8".
POWER REQUIREMENTS:	115 Volts AC 60 CPS 48 Volts AC 60 CPS For other power requirements contact manufacturer.
VIEWING ANGLE:	Horizontal 175,° Vertical 170.°
OPERATING POWER:	Control and actuation maximum 2.7 watts.

LIFE:	Minimum 20 million character displays.
OPERATING SPEED:	75 MS. per display change–standard. 50 MS. per display change–special.
MEMORY:	Selected position is reached directly without reset. Visiontron readouts display symbol directly through 8-channel self seeking position circuit. See circuit schematic diagram and set-up contact code chart.
APPROXIMATE WEIGHT:	1¾ pounds.
CONNECTOR:	Printed circuit board – fits U.S. components connector UPCR-D6-DM30.
MOUNTING:	Front or back panel of plug-in design. See dimensions diagram.
TEMPERATURE RANGE:	–65°F. to 125°F.
NUMBER OF CONNECTING CONDUCTORS:	8 plus common, to control all 40 positions.
DELIVERY:	Standard alpha-numeric readout 2 to 5 weeks depending on quantity.
SPECIAL REQUIREMENTS:	For special applications requirements contact manufacturer.

VISIONTRON

663 FIFTH AVENUE NEW YORK, N.Y. 10022
212-752-4565 516-799-0063

MANUFACTURERS OF ALPHANUMERIC AND NUMERIC READOUTS

VTC

Printed in USA

404

40 POSITION ALPHA-NUMERIC READOUT

PRICE SCHEDULE

MADE IN U.S.A.

DECODER AND DISPLAY IN ONE UNIT

ELECTRO-MAGNETIC OPERATION

BUILT-IN MEMORY

For units with special characters, symbols or a new arrangement of standard characters, add $50.00 to cost of first unit. Thereafter, standard price schedule applies.

For special character colors on black or white add $40.00 to cost of first unit. Thereafter, standard price schedule applies.

Mounting bracket	$ .25 (2 required)
Connector	$1.35

U.S. components connector UPCR-D6-DM30

QUANTITY	MINIMUM QUANTITY PER RELEASE	PRICE PER UNIT
1–9	complete	49.85
10–99	complete	44.75
100–499	50	41.25
500–999	100	38.95
1000–2499	500	34.75
2500–4999	1000	29.85

For quantities of 5,000 or greater consult factory for quotation
See price policy, shipment and warranty on the reverse side.

MODEL DESIGN & SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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663 FIFTH AVENUE NEW YORK N. Y. 10022 212 752-4565
516 799-0063

S 46-10-63 PRINTED IN U.S.A.

PRICE POLICY, SHIPMENTS, WARRANTY

Orders become effective only when accepted and acknowledged by the Factory. Prices, terms and discounts are subject to change without notice, and orders will be billed at prices in effect at time of shipment.

Minimum Billing:

Minimum Billing on any order $5.00.

Taxes:

Prices do not include state or local taxes based on or measured by sales. Such tax or taxes, where applicable will be added to the prices, unless exemptions are supported with resale number on face of order.

Cancellations:

No cancellation or order change will be accepted on orders in production, or scheduled for production within 15 days. At Visiontron option, other changes or cancellations may be made upon payment of reasonable charges, which take into account expenses already incurred and commitments made by the Company.

Terms of Payment:

Terms are 30 days net from date of invoice.

Shipping:

Shipments are made F.O.B. Factory. Whenever possible, shipments to open accounts are by parcel post with prepaid charges added to the invoice. All other shipments are C.O.D. with method and route selected by Visiontron Corporation unless otherwise specified.

Lost, Damaged or Delayed Shipments:

Special care is exercised in packing for shipment, however, the Company assumes no responsibility for delay, breakage, or damage after having made delivery in good condition to the carrier. All claims for breakage and damage should be made directly to the carrier. Visiontron be glad to render all possible assistance in securing satisfactory adjustments to such claims.

The Company shall not be liable for loss, damage, detention, or delay resulting from causes beyond its reasonable control or caused by fire, strike, civil or military authority, priority requests of the U. S. Government or representative thereof, insurrection or riot, embargoes, car shortages, wrecks or delays in transportation, or inability to obtain necessary labor, materials or manufacturing facilities due to such causes.

Warranty:

The Company warrants its products against defective material or workmanship for a period of one year from date of shipment from the Factory when utilized in accordance with instructions and specified ratings. This warranty covers repair or replacement at Visiontron Factory only. The Company will not assume any expense or liability for repairs made upon its products outside the Factory without written consent.

The Company is not responsible for damage to any apparatus caused by improper installation, operation, or maintenance. Under no circumstances shall the Company be liable for loss of profit, or other consequential damages.

Repairs:

In most instances, repairs in the field are impractical. All products requiring servicing should be sent prepaid to the Factory accompanied by an order or letter stating the nature of the trouble as completely as possible. A copy of the Company's repair policy, shipping instructions and rate schedule will be forwarded upon request.

VTC

CORPORATION
VISIONTRON
663 FIFTH AVENUE • NEW YORK • N.Y. 10022 • 212 752-4565
516 799-0063

Dear Sir:

The material enclosed herewith has been prepared for you and for other designers and engineers in the readout display field, to introduce you to our new readout modular unit unaffected by ambient light conditions. I hope it provides useful information of engineering value.

Thank you again for your interest. We look forward to hearing from you.

Very truly yours,

VISIONTRON CORPORATION

Brett De Dube
Sales Manager

Encl.

BD/mf

OPEN AND FLIP

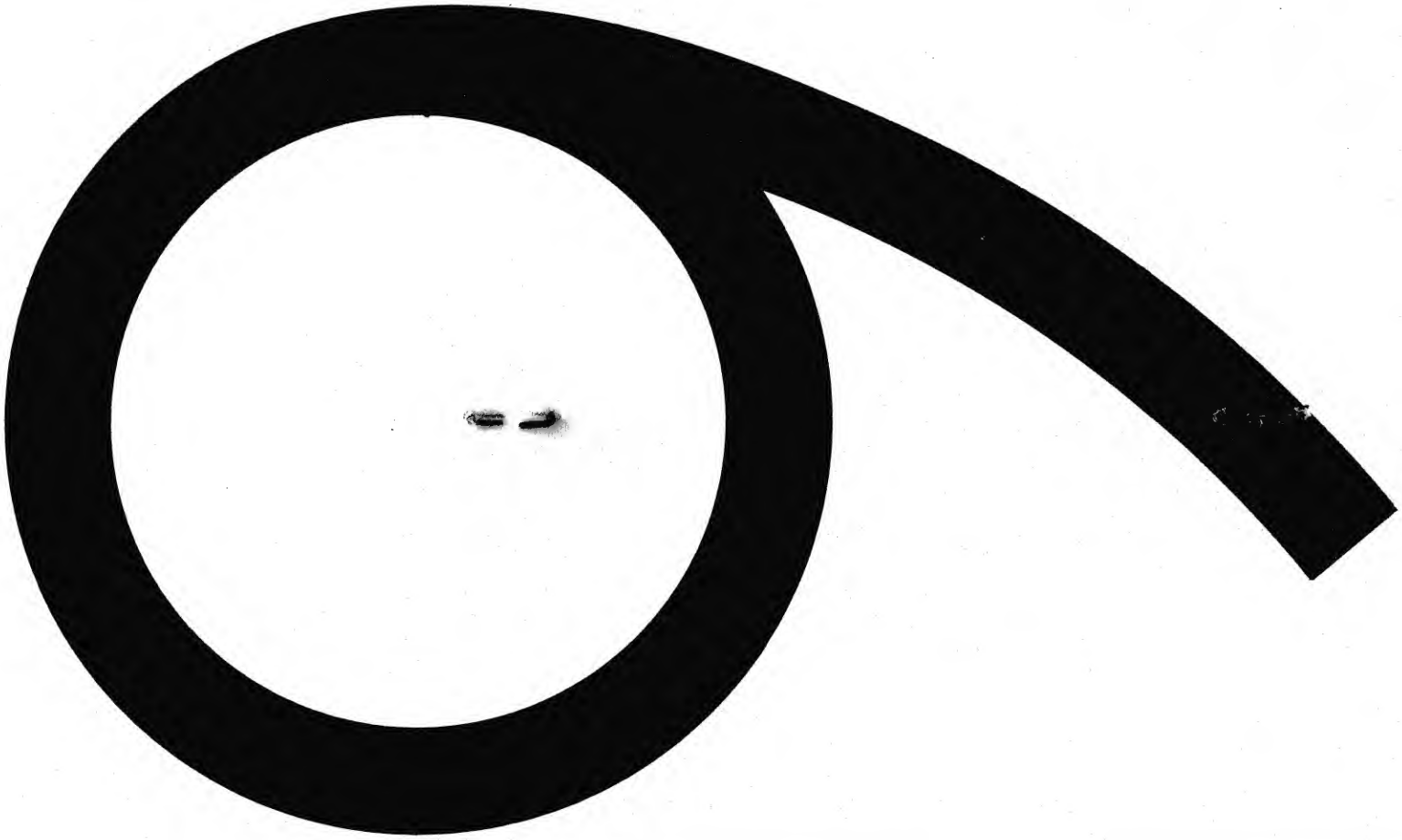
DISCOVER THE ROTATING FLAP PRINCIPAL OF THE VISIONTRON ALPHANUMERIC READOUT

Choose character size, color and shape to fit your application.

No need to worry about problems commonly encountered with bulb and projection type readouts.

Specify Visiontron readouts and increase your margin of safety by factor of

12



YOU HAVE FLIPPED

YOUR WAY INTO

1968

• • • • • • • • •

ahead in the visual display state of art.

• • •

We believe in keeping

Visiontron has become one of the leading manufacturers of the rotating flap readouts. It's probable that many of Visiontron readout features can make a difference for your system acceptance.

Specify Visiontron readouts

and **ELIMINATE**

- Bulb replacement (num ber of units X 12 =)
- Decrease of legibility with increase of ambient light level
- High current switching
- Loss of information during power failure

and **GAIN**

- High contrast display not affected by ambient light conditions
- Universally accepted character shapes (Gothic)
- Advantage of NO elec tric current to sustain posted information
- Long, maintenance free, life
- Sustaining information during power failure

Anything you can put on paper . . . . you can display on Visiontron Readout in Color

40 Displays per Readout

MADE IN U.S.A.

Reg. U. S. Pat. Off. Pending

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40 POSITION ALPHA-NUMERIC READOUT

VTC

VISIONTRON

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